DOCUMENT RESUME

ED 059 021 RE 003 989

AUTHOR	Baker, Jean M.; And Others
TITLE	Bicultural Socialization: A Group Process Approach to Bilingual Instruction. Case Study Reports.
INSTITUTION	Arizona Univ., Tucson. Arizona Center for Early Childhood Education.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C.
PUB DATE	71
GRANT	OEG-0-9-12011-3465
NOTE	41p.
EDRS PRICE	MF-$0.65 HC-$3.29
DESCRIPTORS	*Anti Social Behavior; *Behavior Change; Bilingual Education; Case Studies (Education); *Group Behavior; *Leadership Training; Methods Research; Positive Reinforcement; *Reading Habits; Reading Interests; Rewards; Student Behavior

ABSTRACT

Three studies were carried out to explore and evaluate alternative methods of meeting the objectives of a bilingual education project. The first study explored children's book usage behaviors and how these behaviors were influenced by the requirement to fill out book reports and a reward reinforcement. It was found (1) that fewer children sampled books as a result of the report requirement, but those who did tended to stick with one book and read it more thoroughly and (2) that the reward reinforcement system had a significant effect on encouraging reading and reporting. The second case study investigated a second-grade boy's extremely disruptive behavior in the classroom. Recorded data showed that when the teacher used positive social reinforcement and a token system to encourage good behaviors, frequency of the disruptive behavior dropped immensely, but it climbed up again when the token system was discontinued. The third study dealt with children's leadership behaviors. Data on children's behavior were collected at different phases before and after a training on group participation and leadership. Results showed that the training had positive effects on children's behavior and attitude. Tables and charts are included. (AW)

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BICULTURAL SOCIALIZATION: A GROUP PROCESS APPROACH TO BILINGUAL INSTRUCTION

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CASE STUDY REPORTS

by

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These case studies were carried out during the school year 1970-71 with the support of a grant from the Bilingual Branch of the United States Office of Education, United States Department of Health, Education and Welfare, (No. OEG-0-9-12011-3465, Project No. 12-0066) to Wilson School District No. 7, Phoenix, Arizona.

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PREFACE

The University of Arizona, acting as a subcontractor to the Wilson School District to perform training and research functions for the district's Bilingual Education grant, were to explore and evaluate alternative methods of meeting project objectives. One method of reporting the results of such exploration and evaluation was to be through a series of case studies. The studies reported here are a representative sample suitable for use as a training resource.

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I. Book Usage Case Study

II. Disruptive Behavior Case Study - I

III. Leadership Case Study

BOOK USAGE CASE STUDY

PROBLEM:

The book usage case study grew out of an attempt to increase the interest of the children in reading. Students in the reading class, which differed from the project experimental classes in that the students were grouped homogenously, had exhibited little interest in reading books.

OBJECTIVES:

Two objectives were desired:

1) That the children would spend more time with the books when given free choice,

2) That the children would read the books more thoroughly when they had them.

APPROACHES:

The project was to consist of four phases:

1) Baseline data collection -- for each child, a record was kept of how many books he sampled during each recording session. During Phase 1, no interference occurred in the contingencies in effect prior to the start of the study. The children continued to sample and read books as they were inclined to do before the study commenced. The information collected during this period provided genuine baseline data with regard to the book sampling behavior of the children.

2) Reporting forms introduced -- for each child, a record was kept of how many books he sampled, read, and reported on during each recording session. During Phase 2, the child was asked to fill out a report on each book he read. The filling out of the report form was regarded by the children as a difficult, undesirable activity. The introduction of the report forms had a disruptive effect on the sampling behavior of the children; nevertheless, it was necessary to have some way to appraise how thoroughly the children were reading the books. The report forms were decided upon as a means of obtaining this information. (In the discussion section, some other ways of obtaining the information are considered.)

3) Reinforcement for reporting introduced -- for each child, records were kept as in Phase 2, but the children were rewarded

tangibly for making reports on the books they had read. A record card was kept for each child and, as the children completed reports, stickers were affixed to their cards. After a child had accumulated five stickers, he was given an animal sticker which he could attach to the publicly displayed group card for the group of which he was a member. The group cards were posted on a bulletin board as individual cars in a circus train. It was anticipated that during this phase the reading and reporting behavior of the children would increase from what it had been during phase 2.

4) Delayed reinforcement for reporting introduced -- for each child, records were to be kept as in Phase 2, but instead of receiving immediate reinforcement for submitting the book reports, the reinforcement was to be supplied a day or more after the reports were turned in. In a transition period, the child would have been given the option of receiving an immediate reward or of waiting and receiving a larger, delayed reward. (Time limitations prevented this phase from being carried out.)

OBSERVATION TECHNIQUES:

The children in the reading class met together from 1:00 to 2:00 PM daily. The class occasionally met as a unit, with all the children attending to the same activity at the same time. Most frequently, the children were in five groups of five or six children in each group.

An observer was present at most of the reading class sessions during the 16 weeks that the study was in progress. However, changes in the class routines and the necessity of recording other forms prevented the collection of data on book usage during each day. In all, records pertaining to the book usage case study were collected on 42 occasions.

Three categories of behavior were recorded. These categories were: the sampling, the reading, and the reporting on books. "Sampling" was scored as having occurred when a child would take a book from the library shelf and open it. "Reading" was scored as having occurred when the observer thought that a child appeared to be reading a book. "Reporting on" was scored as having occurred when a child turned in one of the dittoed forms answering questions about a book which he had read.

The measures on sampling and on reporting were based on rather objective evidence; the measures on reading were based on the subjective feeling of the observers. For all measures, the inter-observer reliability scores were high with the median reliability scores for all measurements ranging from 90 to 100%. (See attached sheet on Reliability.)

During the time that the reading class was in session, the observer would record the number of children sampling, reading, and reporting on books. A scoring sheet is attached. Alongside each name, provision was made for hash marks to be entered indicating the number of instances of behavior in each category. Totals for each day for each category were obtained. Totals were also obtained of the numbers of children engaged in the behaviors of the different categories. Weekly totals were computed and averages for different phases of the study were calculated.

RESULTS:

The results of the study are summarized in three tables. The three activities recorded, sampling, reading, and reporting, formed the basis of each table. Each table gives the average number or the percentage of children of the reading session who would engage in a given activity during a given day.

In the first table, the average rate of activity per child engaged in that activity is given. For the sampling activity, the first table shows the average number of books sampled by those children who actually engaged in the sampling activity. This table reveals the usage of the books by those children who made an effort to use the books.

In the second table, the average rate of activity for all the children in the reading session is given. For the sampling activity, the second table shows the average number of books sampled by all the children in the class, regardless of whether they actually sampled the books or not, during a given session. This table reveals the percentage of children who made use of the books during a classroom session.

In the third table, the percentage of children of the reading session who actually engaged in a specific activity is given. For the sampling activity, the percentage of children of the reading class who actually sampled at least one book is given. This table reveals the percentage of children who made use of the books during a classroom session.

SAMPLING BOOKS:

From the first table, it can be seen that the sampling of books by children engaged in sampling showed a marked decline from the rate of 2.38 books sampled per sampling child during the baseline period to 1.41 and 1.20 during the second and third phases of the study. This finding suggests that the children

who were sampling books were more likely, once the use of reporting forms was introduced in the second phase, to stay with one book. A rate of 1.00 would indicate that only one book was sampled by each sampling child during a given session. The introduction of the reporting forms may have induced the children to be more persistent in using a single book during the class session, rather than looking through several different books without concentrating on any given one.

The first table shows that the rate of sampling by sampling children decreased throughout the phases of the study. The second table shows that the rate of sampling by all the children in the class increased in the third phase from what it had been in the second. The third table shows the reason for the increase.

It is evident from the third table that, whereas almost 2 out of every 3 children actually sampled books during the baseline period, only 1 out of every 3 sampled books immediately after the forms were introduced. After reinforcement for making reports had been introduced, the percentage of children sampling increased, but still had not attained the level at which it had existed prior to the introduction of the forms.

READING BOOKS:

No data had been collected on reading activity during the baseline period. The first table shows that the rate of reading children increased slightly between the second and third phases of the study. Most impressive is the five-fold increase in the percentage of all children who were actually reading. From Table III, it can be seen that after the introduction of the reporting forms, only 1 out of 20 children in the class was actually observed to be reading; after reinforcement was introduced, 5 out of every 20 children in the class were observed to be reading.

REPORTING ON BOOKS:

Between the time of the introduction of the reporting forms and the introduction of reinforcement for reporting, the first table shows that the average number of reports turned in per child who submitted a report remained slightly higher than one report per period. The third table shows that the percentage of children reproting on books increased from 8% to 12% of the class during the second and third phases of the study.

SUMMARY:

The general results of the study indicate that the introduction of the reporting forms severely affected the sampling

behavior of the children in the reading session. Not only did the average number of books sampled drop drastically after the introduction of the reporting forms, but less than half as many children were observed to sample the books after the introduction of the reporting forms. The percentage of children sampling books did increase after the introduction of reinforcement for reporting on books, but did not regain the high point of 2 out of 3 children sampling.

There appeared to be a phenomenal increase in the percentage of children actually reading the books instead of simply sampling them during the second and third phases. Whereas less than one out of every six children who sampled books was seen to be reading them during the second phase, more than three out of every six appeared to be doing so after the introduction of reinforcement for reporting. (See Table IV.)

The reporting behavior of the children increased by 50% between the second and third phases, although the overall rate of responding remained low.

From the results, we may conclude that on the average, fewer children spent time with the books as a result of our intervention, but that those who spent time with the books were more persistent in sticking with one book during the reading session and that their reading of the books increased considerably, even though their reporting did not increase so markedly.

DISCUSSION:

There were many difficulties in conducting this case study. The difficulties are summarized under the headings, "class structure", "materials", and "reporting measures".

A. Class Structure:

At different times during the course of the study, the teacher would have the children function as a single group, with all of the children doing the same thing at once. Such large group, uniform activity situations did not permit much individual opportunity for children to sample the books.

During most of the course of the study, the reading class was divided into five groups of five to six children in each group. Frequently, one of the groups would be experiencing free choice and could, therefore, sample books when they chose to do so. Almost always, the children in the other groups were offered the free choice activity of sampling the books when they finished their assigned work. The work load would vary considerably

from group to group and from day to day so that, there was considerable variation in the numbers of children who had the opportunity to sample on a given day.

One way to overcome the difficulty introduced by the considerable variation in the number of children who were experiencing free choice to sample books would be to have the observer follow the activities of specific children, different ones each day. Presumably, the random factors would balance out, although there must be great daily variance. If the observer chose to observe only groups which were experiencing free choice, some variation would be introduced by factors such as the earlier work load, etc., which would color the children's inclination to sample.

It had originally been planned that the observer would record the book usage behavior of the group of six children which was experiencing assigned free choice (as opposed to work-completed free choice) each day. This could not be done because, especially at the start of the study, the class was meeting as a whole the majority of the time. Later in the study, when groups were assigned free choice, they were given it for differing lengths of time, making it difficult to compare the results obtained.

The observation procedure used, although resulting ingreat daily variations because of changes in class structure, in the number of children experiencing free choice, etc., did allow for accurate reporting on the actual usage of the books by the children. The averages taken over the different phases of the study presumably cancelled out the random variations introduced by the differences in class structure from day to day.

B. Materials:

The books offered the children for free choice reading needed to provide for a wider range of reading abilities so that each child could find something which suited his ability. The materials needed to be changed frequently so that there would always be something new for the more active readers. Five new books were introduced every other day. It is doubtful, however, that a library consisting of 20 to 25 books could provide the range and

variation which would be desirable in a study of book usage.

C. Reporting Measures:

The measuring of the sampling activity of the children required that certain rules were introduced. There was the possibility that the children would exchange the books among themselves after taking them from the library table or that several children would sample the same book at once. Rules were introduced saying that books had to be used by only one person at a time and that they had to be returned to the shelf after each person finished using them. The conformance of the children to these rules allowed for an accurate measure of the sampling behavior of the children, but the introduction of these rules may have had some slight, adverse effect on the feeling of free choice in the reading sessions.

The strongest effect on the reading activity was the introduction of reporting forms for reading. The introduction of the book report form caused an immediate, severe drop in the sampling behavior of the children. This was, in part, because of the fact that second-grade children regarded the making of a report, no matter how simplified the form used, a difficult task. The report forms asked the same, simple questions for each book: title, who was the main character, what happened, etc. They were given to the children as they turned in the books.

It was necessary to obtain some measure of how thoroughly a child was reading a book when he appeared to be reading it. Obtaining this information was difficult. The report forms were decided on as a means of providing us with the information. Alternatives were considered. Ideally, a teacher could ask a child to tell about the story after observing the child going through a book. There would be difficulties: a child might know the story from looking at the pictures; he might simply guess at the story; or he might report on one which he had reproted on earlier. None of these possibilities could be guaranteed against.

Probably the best way of determining whether a child had read a story would have been for him to have been listened to by an observer while he was actually engaged in the process. But having an observer listen to the child as he read would be to introduce another, probably very positive factor, which would induce the child to read. Hence, the effort to get at the increase in the reading of books would be distorted. Despite the drawbacks to the use

of the dittoed reporting forms, they were decided upon as the means of obtaining the information, albeit at a crude level, of how thoroughly the children were reading the books when they were seen to be reading them.

SUMMARY:

In terms of the first objective of the study, that the children would spend more time with the books when given free choice, the severe drop in sampling behavior after the baseline was not compensated for by the increase in sampling after the introduction of reinforcement for completing the report forms.

In terms of the second objective, that the children would read the books more thoroughly when they had them, the results showed postive gains by a number of measures. The reading behavior, as reported by the observers, increased fivefold after the introduction of reinforcement. The sampling per sampling child dropped from 2.38 to 1.20, indicating that the children were more likely to stay with a single book that to go from book to book. The reporting rate showed some increase during the third phase of the study, and might have been expected to have shown further increases had the rewards been strengthened.

A finding which was not desired by the study, but which should be emphasized because of its strength, was the fact that the sampling behavior of the children was almost halved by the introduction of reporting forms. This finding warrants special attention because it demonstrates, objectively, the adverse effect of coupling reading with writing. Apparently, many children will sample books for their own enjoyment, but, when the sampling is connected with reporting on the books (no report was required, but the children were encouraged to make one by being given a report form at the time they handed the books in), the sampling will drop off.

TABLE I

BOOK USAGE BY CHILDREN USING THE BOOKS

Phase	1	2	3
Average number of books sampled by sampling children	2.38	1.41	1.20
Average number of books read by reading children		1.00	1.09
Average number of books reported by reporting children		1.22*	1.12

TABLE II

BOOK USAGE BY ALL THE CHILDREN

Phase	1	2	3
Average number of books sampled by all children	1.48	.44	.52
Average number of books read by all children		.05	.26
Average number of books reported by all children		.10*	.14

TABLE III

PERCENTAGE OF CHILDREN ENGAGED IN BEHAVIOR

Phase	1	2	3
% of all children who sampled	62%	31%	43%
% of all children who read		5%	24%
% of all children who reported		8%	12%

* Note: These figures may be too high because, during this period, children may have been reporting on books which they had read earlier in the semester.

TABLE IV

CHANGE IN READING BEHAVIOR

Phase	1	2	3
Number of children sampling		96	160
Number of children reading		18	88
% of children sampling who were reading		18.7%	55.0%

Phase 1 - January 25 --

2 - February 8 --

3 - March 12 - May 17

RELIABILITY

Item	Range of Reliability Scores		Average R.S.	Medium R.S.
Number of Children	100	100	100	100
Number of Books Sampled	93	100	98	100
Number of Children Sampling	100	100	100	100
Number of Books Read	85	100	96	100
Number of Children Reading	91	100	97	100
Number of Books Reported	0	100	70	90
Number of Children Reporting	0	100	70	90

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BICULTURAL SOCIALIZATION PROJECT

Book Usage Case Study

Number of children 21

Books were sampled

reported on

Time Sampled 1:20-2:

Date 5-18-71

Observer Jean S.

	Sampled		read		reported on	
Greg	/					
Myrum						
James	/		/			
Jimmy	/					
Karen	/		/			
Lonna						
Ralph	/		/			
Raul Conchos						
Raul Sabori	/		/			
Robert P.						
Robert A.	/					
Rose Ann	/		/		/	
Roy						
Tana						
Terrie	/		/			
Patty Tabor	/					
Susan	//		//		/	
Cindy	//		//		//	
Richard						
Eddie	//		/		/	
Brenda	//		//		/	
Leroy	/					
Robert B.	/					
Dorthy.	/					
Serial						

Total 21 13 6

CATEGORIES 5

TOTAL CHILDREN 17 10

Title: BOOK USAGE

RELIABILITY

Info Recorded & Averaged	Reliability Test Used	Range of Reliability Scores Low	Range of Reliability Scores High	Average R.S.	Median R.S.	Number of R. tests	Total of R. units
# of CHILDREN	S.1/S.2	100	100	100	100	4	"
# of BOOKS SAMPLED	"	93	100	98	100	4	"
# of CHILDREN SAMPLED	"	100	100	100	100	4	"
# ACTUALLY READ	"	85	100	96	100	4	"
# of CHILDREN REPORTING	"	91	100	97	100	4	"
# REPORTED ON	"	0	100	70	90	4	"
# REPORTING	"	0	100	70	90	4	"

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☑ Total of Scores
☐ Averages of Total of Scores

Title: BOOK USAGE Reporting: SUMMARY p.

Period Beginning:	JAN 25		FEB 8		FEB 26		MAR 12		APR 16		JAN 25		FEB 8		MAR 12	
Info Recorded & Averaged	1		2		3		4		5		6		7		8	
Number of Children		202		158		147		159		207		202		305		366
Books Shelved		300		96		52		89		104		300		136		193
# of Children Shelved		126		68		36		67		93		126		96		160
Books Read				6		12		33		63				18		96
# of Children Read				6		12		22		56				18		88
Books Reshelved				9		24		16		37				33		53
# of Children Ret.				9		18		16		31				27		47
Number of Intervals																

Events Demarcating Periods:

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Title: Book Usage

Page: ___

Dates:	APR 13		APR 20		APR 21		APR 23		APR 26	
Observer 1:	JS		WE		WE		WE		WE	
Observer 2:	WE		JS		JS		JS		JS	
Info Recorded & Arranged										
# children	21		20	100	21	100	21	100	20	100
	21		20		21		21		20	
# books sampled	6		13	100	13	93	8	100	2	100
	5		13		14		8		2	
# children sampling	6	RECORDED	12	100	12	100	8	100	2	100
	5		12		12		8		2	
# actually read	2	AS	2	100	11	85	6	100	2	100
	4		2		13		6		2	
# children reading	2	SCORED	2	100	10	91	6	100	2	100
	4		2		11		6		2	
# reported on	3	NOT	5	80	8	100	4	100	0	0
	4		4		8		4		1	
# reporting	3		5	80	6	100	4	100	0	0
	4		4		6		4		1	
Reason if Interesting										

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Total of Scores
Averages of Total of Scores

Title: BOOK USAGE Reporting: SUMMARY 9

	Period Endings:	JAN. 25	FEB 8	FEB 26	MAR 12	APR 16	JAN 25	FEB 8	MAR 12
	Info. Recorded & Averaged	1	2	3	4	5	6		
TABLE I								TABLE I	
	Av. # of BOOKS SAMPLED by SAMPLING CHILDREN	2.38	1.41	1.44	1.32	1.11	2.38	1.41	1.20
	Av. # of BOOKS READ by READING CHILDREN		1.00	1.00	1.03	1.12		1.00	1.09
	Av. # of BOOKS REPORTED by REPORTING CHILDREN		1.00	1.33	1.00	1.19		1.22	1.12
								TABLE II	
TABLE II	Av. # of BOOKS SAMPLED by ALL CHILDREN	1.48	.60	.35	.55	.50	1.48	.44	.52
	Av. # of BOOKS READ by ALL CHILDREN		.03	.08	.20	.30		.05	.26
	Av. # of BOOKS REPORTED by ALL CHILDREN		.05	.16	.10	.17		.10	.14
								TABLE III	
TABLE III	% of ALL CHILDREN WHO SAMPLED	62%	43%	24%	42%	44%	62%	31%	43%
	% of ALL CHILDREN WHO READ		3%	8%	20%	27%		5%	24%
	% of ALL CHILDREN WHO REPORTED		5%	12%	10%	14%		8%	12%
	Number of Intervals	8	7	7	7	10	8	14	17

Events Demarcating Periods:

1 BASELINE
2 INSTRUCTIONS GIVEN ON REPORTING
3 " " " "
4 REINFORCEMENT GIVEN for REPORTING
5 " " " "
6 SAME AS 1
7 COMBINED 2+3
8 COMBINED 4+5

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DISRUPTIVE BEHAVIOR CASE STUDY - I

PROBLEM IDENTIFICATION:

A second grade boy (William A)* in a project classroom was exhibiting extremely disruptive behavior. The specific behaviors described by the teacher were loud talking and shouting, being out of his seat at inappropriate times, and failing to do assigned work.

DESIRED OBJECTIVES OR GOAL BEHAVIORS:

Since one desired objective is to decrease the frequency of disruptive behavior, it was important to select desirable behaviors incompatible with the problem behavior, to positively reinforce. This was discussed with the teacher and the teacher aide and the following goal behaviors for William were chosen:

1) Sitting quietly in his seat.

2) Doing assigned work.

BASELINE DATA:

In order to evaluate the effectiveness of an intervention program it is important to obtain reliable information about the frequency of a problem behavior prior to the intervention. In this case, a behavioral observation form (Disruptive Behavior Schedule) was developed in order to determine the frequency of William's disruptive behavior in the classroom. A classroom observer obtained data on this schedule for one hour per day for a period of approximately two weeks. The observation times were scheduled so that all hours of the school day would be sampled, thus reducing the possibility that the behavior recorded would not be representative of behavior for the total school day. The Disruptive Behavior Schedule which was used is included at the end of this study.

PROCEDURE FOR REDUCING THE FREQUENCY OF DISRUPTIVE BEHAVIOR:

A meeting was held by the project manager with the teacher, teacher aide and site coordinator. During this meeting it was suggested that William might be inadvertently receiving a lot of attention for his disruptive behavior. Changing these contingencies so that William would receive attention for appropriate classroom behavior was the recommended strategy.

* The name is fictitious.

The teacher and aide were asked to try to ignore the boy's disruptive behavior as much as possible. Of course, behaviors which could be harmful to himself or others could not be ignored, but many of William's behaviors were merely annoying and could safely be ignored.

The use of positve social reinforcement for William's appropriate classroom behavior particularly the two goal behaviors was suggested to the teacher and teacher aide. This reinforcement was to be in the form of verbal praise, physical affection, smiles, or whatever the teacher or aide felt comfortable doing. They were asked to be sure to tell William exactly what he did that was being reinforced. For example, "William I liked the way you sat down quietly when you came into the room."

When attempting to change behavior, it is important to use shaping techniques, that is, to reinforce approximations. Therefore, it was recommended that, at this point, William should be attended to and praised for just remaining in his chair for very short periods of time. If he should engage in appropriate work behavior for just a few minutes, that behavior should be immediately reinforced.

In addition to social reinforcement it was also recommended that a point system be used. William could earn points when he engaged in the goal behaviors:

1. Sitting quietly in his seat and

2. Doing his assigned work.

The points were to be recorded on a card kept on the teacher's desk. The teacher was asked to explain to William that he could earn points (or stars) for engaging in the two goal behaviors. It was also to be explained to him that he would not earn a point everytime he was being "good" but just some of the time. The teacher and aide were to use their own discretion about how often to give the points. However, it was explained that in the beginning it is important to reinforce frequently. William was to be told each time he was given a point, what the behavior was which had earned the point. For example, "William, I am giving you a point because you were working so hard on your arithmetic."

It was suggested that the points William earned should receive back-up reinforcement at the end of each day.. Points could be exchanged for various privileges and rewards. Some of those suggested were:

1. One minute of free choice time for every point.
2. One minute of playing dominoes with a friend for every point.
3. A letter home to his parents describing his good behavior at school that day.
4. An inexpensive toy.

If William should begin to ask for points, the teacher and aide were instructed to tell him he would never receive points when he asked for them.

DATE INTERVENTION PROCEDURES BEGIN

The token system was started on December 8, 1970.

DATA OBTAINED FOR EVALUATION OF PROCEDURES

The classroom observer continued to record William's behavior approximately one hour per day using the "Disruptive Behavior Schedule" as during the baseline period.

OUTCOME AND EVALUATION:

The baseline data showed a mean frequency of 22.2 occurrences of disruptive behavior per hour. (See the graph at the end of this report.) On the day on which the token system began (December 8), the behavioral frequency dropped to zero,, but gradually began to climb back up. The token system was in effect through December 17. During this period the mean frequency of occurrence of disruptive behavior was 12.4 The behavior was thus occurring only a little more than half as frequently as it had prior to the intervention procedures.

After the Christmas holidays, the teacher failed to reinstate the token system. At a meeting with the teacher, the aide and the site coordinator on January 15, the teacher expressed dissatisfaction with the progress in changing William's behavior. She was shown the data again and reminded that the frequency of disruptive behavior had been reduced by almost half. It was suggested that the token system be started again and the teacher agreed. However, she did not ever follow through with this.

William's disruptive behavior was recorded for approximately three more weeks. During this period the frequency of disruptive behavior remained fairly low for about a week and then began to climb back up. The mean frequency for this period, during which the token system was not in effect, was 14.0 which is a somewhat higher frequency than occurred during the token phase.

The token system paired with social reinforcement was effective in reducing the frequency of this child's disruptive behavior in the classroom. Though the teacher did not wish to continue using the token system, she did continue to use social reinforcement of good behavior in her classroom quite effectively. This practice may function to help maintain the behavioral improvement in this case.

DISRUPTIVE BEHAVIOR SCHEDULE

PROCEDURE:

The "Disruptive Behavior Schedule" is designed to be a record of an individual student's behavior in the classroom environment. The Observer's attention will focus upon the behavior of a single student for a one hour period. The one hour shall be divided into ten intervals of five minutes each. Between each five minute interval the observer will take a minute or two to write down a description of the disruptive behaviors which occurred during the previous 5 minute period.

Disruptive Behavior, shall be defined as any action which disturbs, or distracts the attention of another student or students from their assigned tasks. Thus, if the subject is speaking loudly while the teacher or teacher's aide is giving instructions to the class, a hash mark would be placed under "Disruptive Behavior." In this category, we shall consider "disruptive behavior" as including, but not limited to, loud talking, being out of one's seat, hitting, poking, throwing things, giving answers to questions not directed tothe subject, running, climbing.

A hash mark in the disruptive behavior column will be recorded for each separate incidence of such behavior. Thus, if a child is shouting in a loud voice and then stops momentarily and starts again during the 5 minute interval this can be recorded as two separate incidences.

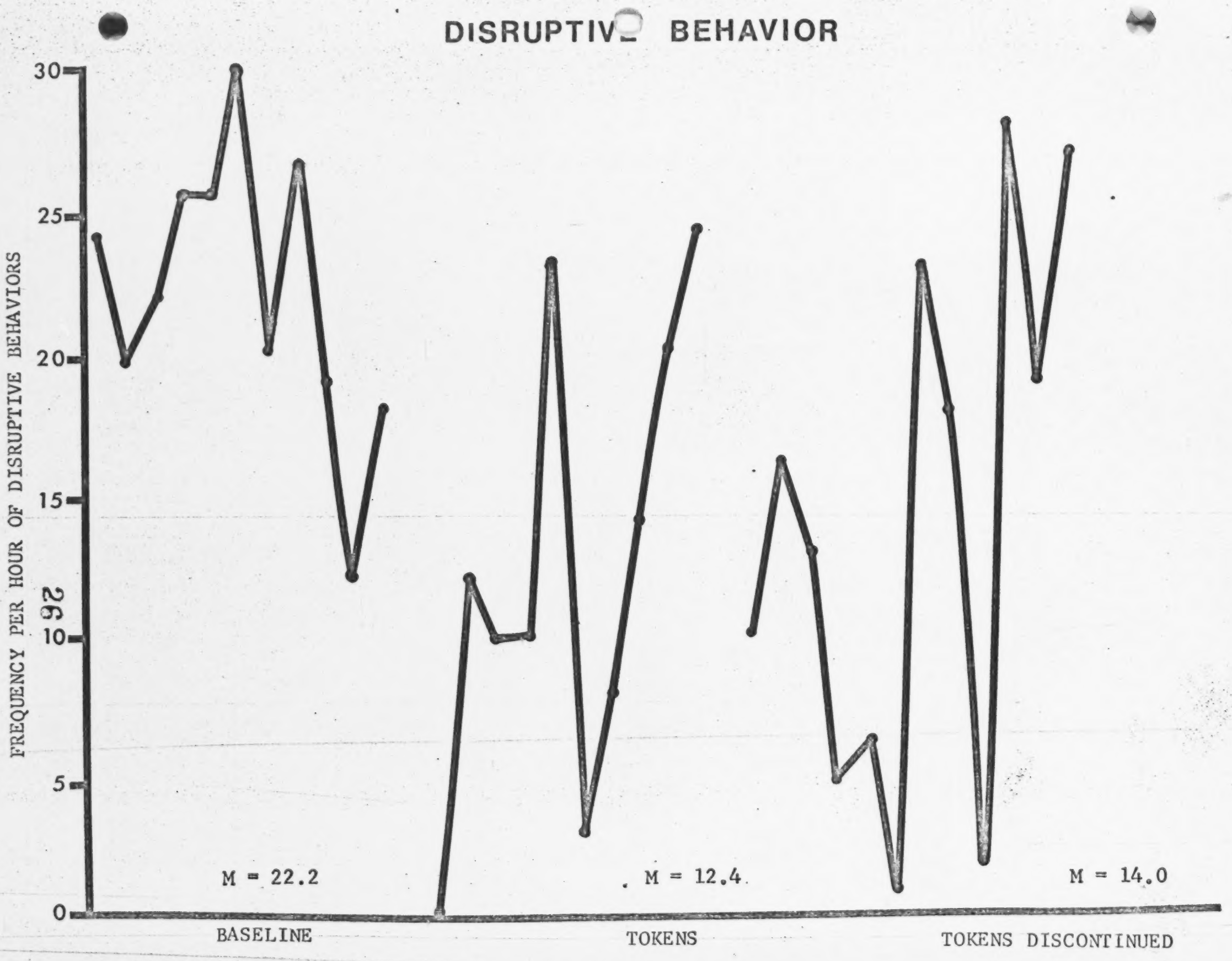
COMMENT:

This recording form was used prior to developing a more reliable form based on occurrence or non-occurrence of any disruptive behavior in a 10 second interval, because the timers necessary for this latter approach were not yet available at the time this data was collected. A copy of the subsequent form used later in the year for the same purpose is included in a separate manual.

DISRUPTIVE BEHAVIOR SCHEDULE

School_____ Teacher_____
Observer_____ Student_____
Date_____ Time_____

5 Minute Intervals	Disruptive Behavior	Description of Disruptive Behavior
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
Totals		


DISRUPTIVE BEHAVIOR
FREQUENCY PER HOUR OF DISRUPTIVE BEHAVIORS
30
25
20
15
10
5
0
M = 22.2
M = 12.4
M = 14.0
BASELINE
TOKENS
TOKENS DISCONTINUED

LEADERSHIP CASE STUDY

PROBLEM IDENTIFICATION:

Two teachers at one site had organized their classrooms for small heterogenous group instruction for a major part of each day. Since project objectives emphasized peer teaching and peer modeling, the use of child leaders in the small groups had been encouraged by the project research and training staff. However, both of the teachers reported difficulties related to the use of child leaders. They had observed that the leaders were not performing their duties and felt that this failure interfered with the efficient functioning of the groups. A discussion of this problem with project staff and consultants led to the idea of providing training to the children in both leadership skills and group participation skills.

DESIRED OBJECTIVES OR GOAL BEHAVIORS:

The objectives were to develop children's group and leadership skills to the point where the small groups could function efficiently with a minimum of adult reinforcement.

BASELINE DATA TO BE COLLECTED:

A Leadership Checklist was developed which listed the activities the teachers considered important to effective group functioning. These were all behaviors which the group members and/or leader could be observed to perform or fail to perform. Another observation schedule "Leadership Activity" was developed to record working, disruptive behavior, working together, use of positive reinforcement by the children, and number away from the group. For a three day period, classroom observers were to record children's group behaviors using the two forms described above. Copies of these forms can be found at the end of this report. The data from these observation schedules would provide the baseline data necessary to evaluate the effectiveness of the training program.

STRATEGIES FOR ACHIEVING OBJECTIVES:

A plan for evaluating the effects of group participation and leadership training on children's behavior during group activities was then developed. Data on children's behavior was to be collected during four different phases. These phases were as follows:

Phase I - Baseline Condition. Leaders were those children who had demonstrated natural leadership abilities.

Phase II - Instructions. During this phase the present group leaders were given brief instructions regarding their duties. This list of duties was then posted in the classroom. It consisted of the following:

1. Read instructions.
2. Hand out materials.
3. Help others.
4. Don't criticize.
5. Clean up.
6. Put finished work in box.
7. Praise good workers.
8. Talk about the lesson.

Phase III - Group Participation and Leadership Training. During this phase children were receiving the training in small group settings.

Phase IV. - New Leaders Appointed.

Following the development of this intervention plan, the project research and training staff and a consultant worked together to produce a teacher's manual outlining the training procedures, both content and method. Small group instructional techniques were used in the training process, structuring one of the small group activities as "Group Training". The manual, which is now in the process of revision based on feedback from the teachers who used it, consisted of five separate lessons and provided detailed procedures for teaching the specific skills which the teachers had defined as important for effective group functioning.

All of the lessons were based on learning principles. For example, all desired behaviors were modeled by the teacher before she asked the children to perform them; the children were cued as to when to perform the behaviors

themselves; all children practiced the behaviors while the teacher observed and provided feedback; and appropriate behaviors as well as approximations were socially reinforced immediately after performance. The teacher worked with very small groups (usually 5 and never more than 6) in order to more adequately provide the guided practice and frequent reinforcement needed for this approach. The only exception to this procedure was in Lesson I which is best presented to the whole class, as it merely provides the children with a rationale for the small group approach and for the need for group training.

Phase IV of the study was included for the purpose of determining the extent to which all children, not just those with natural leadership abilities, could function as group leaders. The teachers had discovered that many children were hesitant to act as leaders and many refused the role. The teachers hoped to change this attitude. During the period of training, therefore, the children were told that after completion of the training, all children would have a chance to be a leader if they desired.

OUTCOME AND EVALUATION:

Both subjective and objective measures for evaluating the effect of the training procedures on children's behavior were used.

Subjective measures were obtained from the teachers during an hour long discussion conducted by one of the project consultants with the two teachers, two teacher aides and the site coordinator who had participated in the study. The responses of the participants were overwhelmingly favorable. They all expressed strong support for the group training and its positive effects on children's attitudes toward school and toward themselves and on the children's actual behavior during group activities. They all expressed the view that this type of training should be done before other small group procedures are implemented in a classroom.

In regard to the children's attitudes toward the leadership roles, teachers reported that very few children had wanted to be leaders prior to the training procedures and that afterward, all children wanted to be leaders.

A more detailed list of these subjective impressions of the teachers and aides is included at the end of this report.

The more objective measures used to evaluate outcome were the Leadership Checklist and the Leadership Activity Schedule. The items on the Leadership Checklist were observable behaviors which should be performed during each group activity. (This schedule can be found at the end of this report. The average inter-observer agreement was 97%.) Item 6 on the checklist was not included because it was added after baseline data was collected. Therefore a score of 9 indicated that every item had been checked in the positive direction. The table below summarizes the data from the checklist during each of the four phases.

LEADERSHIP CHECKLIST

MEAN SCORES

	PHASE I	PHASE II	PHASE III	PHASE IV
CLASSROOM 1	3.50	5.33	5.96	5.25
CLASSROOM 2	3.75	5.61	6.97	6.38
MEAN FOR BOTH CLASSROOMS	3.63	5.47	6.47	5.82

The data show a progressive increase, over phases, in effecient group behavior as operationally defined by the items on this checklist, up until new leaders were appointed, at which time a slight decrease occurred.

The Leadership Activity Schedule (See Section at end of this report) was used to measure several other behaviors of both group leaders and group members. One of the behaviors of special interest to the teachers because they believed it to be one which sometimes interfered with effective group functioning was "being away from assigned group." The teachers were hopeful that this behavior would decrease as a function of the group and leadership training procedures. The table below using data obtained from the Leadership Activity Schedule (inter-observer agreement averaged 75%) shows that this decrease

did occur. The phases are the same as described earlier.

LEADERSHIP ACTIVITY SCHEDULE

MEAN NUMBER OF CHILDREN AWAY FROM ASSIGNED GROUP ACTIVITY

PER 10 SECOND INTERVAL

	PHASE I	PHASE II	PHASE III	PHASE IV
CLASSROOM 1	1.43	1.82	1.13	0.49
CLASSROOM 2	2.44	1.39	1.31	0.58
MEAN FOR BOTH CLASSROOMS	1.94	1.61	1.22	0.54

The Leadership Activity Schedule was also used to record children's "on task" or working behavior during small group activities. (Inter-observer agreement on this category averaged 97%.) The table below summarizes this data for the four phases of the study:

LEADERSHIP ACTIVITY SCHEDULE

PERCENT OF TIME IN WHICH CHILD OBSERVED WAS "ON TASK"

	PHASE I	PHASE II	PHASE III	PHASE IV
CLASSROOM 1	90.8	100.0	94.0	95.0
CLASSROOM 2	64.2	65.9	88.1	82.8

The Classroom 1 data do not show significant increases in "on-task" behavior. "On task" behavior was at a high level to begin with and remained high throughout all phases. Classroom 2 data do show a progressive increase in frequency of "on task" behavior throughout the first three phases of the study and then a slight decrease with the appointment of new leaders. These data are difficult to interpret because of problems encountered by the observers in recording the behavior of children away from the group. The observers were sometimes unable to determine if a child away from the group was or was not engaging in "on task" behavior. Therefore, they recorded all such behavior as "on task" unless the behavior was clearly disruptive. In view of the frequent "away from the group" behavior recorded during the first phases of the study, it is probable that actual "on task" behavior increased more than the data from this schedule would now indicate.

Both the subjective and objective measures used for evaluating the outcome of this study suggest strong positive effects of group participation and leadership training on children's behavior during small group activities. The results suggest that training in carefully defined group skills can effectively improve group functioning.

During this study it has become apparent that fairly complex socialization and group skills can be behaviorally defined and then taught to children. Further investigation of the most significant skills needed for optimal group functioning is recommended as is the development of procedures and methods for teaching these skills efficiently.

BICULTURAL SOCIALIZATION PROJECT

LEADERSHIP STUDY

Certain baseline data regarding the behavior of children participating in small group activities is needed for a project study of the development of leadership. The classroom observers will be responsible for obtaining this data. They will use two forms for this purpose.

To obtain the necessary data, the observer will observe small groups individually during the entire time that these groups are in operation during the school day. Each day that these schedules are used, the observer will select one particular group location (for example, the Mathematics Group) and observe the different groups as they pass through this group activity. On the next day the observer will observe at a different group location (perhaps the Language or Art group) and will continue to change locations on each succeeding day until she has observed all of the group activities in turn. If instructed to continue these observations after this time, she will then start again at the group location which she first observed.

LEADERSHIP CHECKLIST:

This checklist should be completed at the end of each small group lesson. The observer must be thoroughly familiar with the checklist so that she will be able to remember the items well enough to postpone the recording until the end of the group meeting.

LEADERSHIP ACTIVITY SCHEDULE:

The observer begins her observation of the small group lesson by observing the leader's behavior during an entire group lesson. It will be necessary for the observer to use a timing device designed to emit a tone every 10 seconds. During this 10 second interval the observer will make a hash mark in the appropriate box or boxes as follows: A hash mark in the W box if an incidence of "on-task" behavior occurs; a hash in the D box if disruptive behavior (high amplitude, noisy, or aggressive), hash mark in the WT box if the leader helps another child or works together with another child, and a hash mark in the + box if the leader socially reinforces (praises) another child.

In the # box, the observer will record the number of children away from the group during that 10 second interval.

After the observer has recorded the leader's behavior during one group session (usually 20 minutes) she will then observe the next group which passes through the same activity. This time she will observe the other group members rather than the group leader using the schedule in the same manner as described above. The observer should begin by observing the child sitting to the left of the leader for one minute (one line on the schedule) and then move to the next child in a clockwise direction. After she

has moved around the circle observing each child for one minute, she should rest for several minutes and then begin recording the first child again. She should continue this process until the teacher asks the groups to change or cease working, Then she should complete the Leadership Checklist for this group.

BICULTURAL SOCIALIZATION PROJECT

Leadership Checklist

Date: _____ Teacher: _____

Time From: _____ To: _____ Observer: _____

Group Activity: _____ On the follwoing pages, was the leader (L) or the children(C) observed? [ ]

Circle Response: 1 2

1. Were the instructions read aloud to the group by the leader or by a child apponted by the leader? yes no

2. If there were materials to distribute, did the leader or a child appointed by the leader distribute them? (Score "yes" if there were no materials to distribute.) yes no

3. Did the leader help those children who needed help? yes no

4. Was the work area cleaned up to meet the teacher's wishes? yes no

5. Was the finished work put away? yes no

6. Did the leader praise other group members for good behavior? yes no

7. Did the leader discuss the activity with the group? (Eg., did he ask such questions as: "How did you like this work?", "Is this work interesting?", "Would you like to do this again?") yes no

8. Did the leader criticize any group member? yes no

9. Did all the children help in cleaning up? yes no

10. Did the leader model ways of doing the task, for example, did he use such statements as "Try it this way.", "Watch how I'm doing it.", or "Listen to how I say it."
(This would be marked "yes" only if question No. 3 is also marked yes. Modeling differs from giving help in that it is a specific form of help in which one <u>shows</u> another how things are done.) yes no

Totals:	W	D	WT	+	#	NUMBER OF INTERVALS

BICULTURAL SOCIALIZATION PROJECT

Leadership Activity

Date:_____ Teacher:_____ Enter who was observed

Time From:_____ Observer_____ L = Leader C = Child ☐

Page No:_____ Group Activity:_____

	1	2	3	4	5	6	W	D	WT	+	#
									Subtotals		
W											
D											
WT											
+											
#											
W											
D											
WT											
+											
#											
W											
D											
WT											
+											
#											
W											
D											
WT											
+											
#											
W											
D											
WT											
+											
#											

	No. of Intervals	W	D	WT	+	#
TOTALS:	36					

REACTIONS OF TEACHERS AND AIDES AFTER USING LEADERSHIP AND GROUP PARTICIPATION TRAINING MANUAL

The training started around the end of March and was completed in April. At the end of the school year the aides and teachers sat down with the site coordinator and Dr. Marian Martin acting as a discussion leader and talked about their reactions to using this type of training in their classrooms. The following statements are quotations from this discussion:

1. Children enjoyed knowing what was expected of them in the groups. (T)

2. After the lessons everybody wanted to be a leader. Before the lessons only a few did. (T)

3. The children didn't seem to need my help as much. They could do things by themselves. (A)

4. The children became very responsible about their duties following the training. (T)

5. Children praised each others work more. They were nicer to each other. They were also more polite to each other. (A)

6. This training helped the groups work a lot better. (A)

7. The training should have started at the beginning of the year. I plan to start out next year with this training. (T)

8. The children are so anxious each day to start working in groups. They hate having a substitute teacher because the substitutes usually won't allow small groups. (T)

9. Reading the instructions aloud has worked very well. The children no longer ask - "What are we supposed to do?"(T)

10. The children have learned to ignore bad behavior. (A)

11. Children now explain the program to new children. New children are integrated more easily. (T)

12. Children know how to <u>help</u> each other now. (A)

13. Skills seem to have generalized to the playground. The children in these rooms are much better at organizing their own games than are children from other classrooms. (Site Coordinator)

14. The children are highly motivated. They want to start working the minute they come in the room. (T)

15. Evaluating the lesson is the most difficult skill. It seems to take too long. Perhaps it should not be done after every group activity but only on occasion. (T)

16. They don't have any trouble when instructions are written in Spanish. (T)

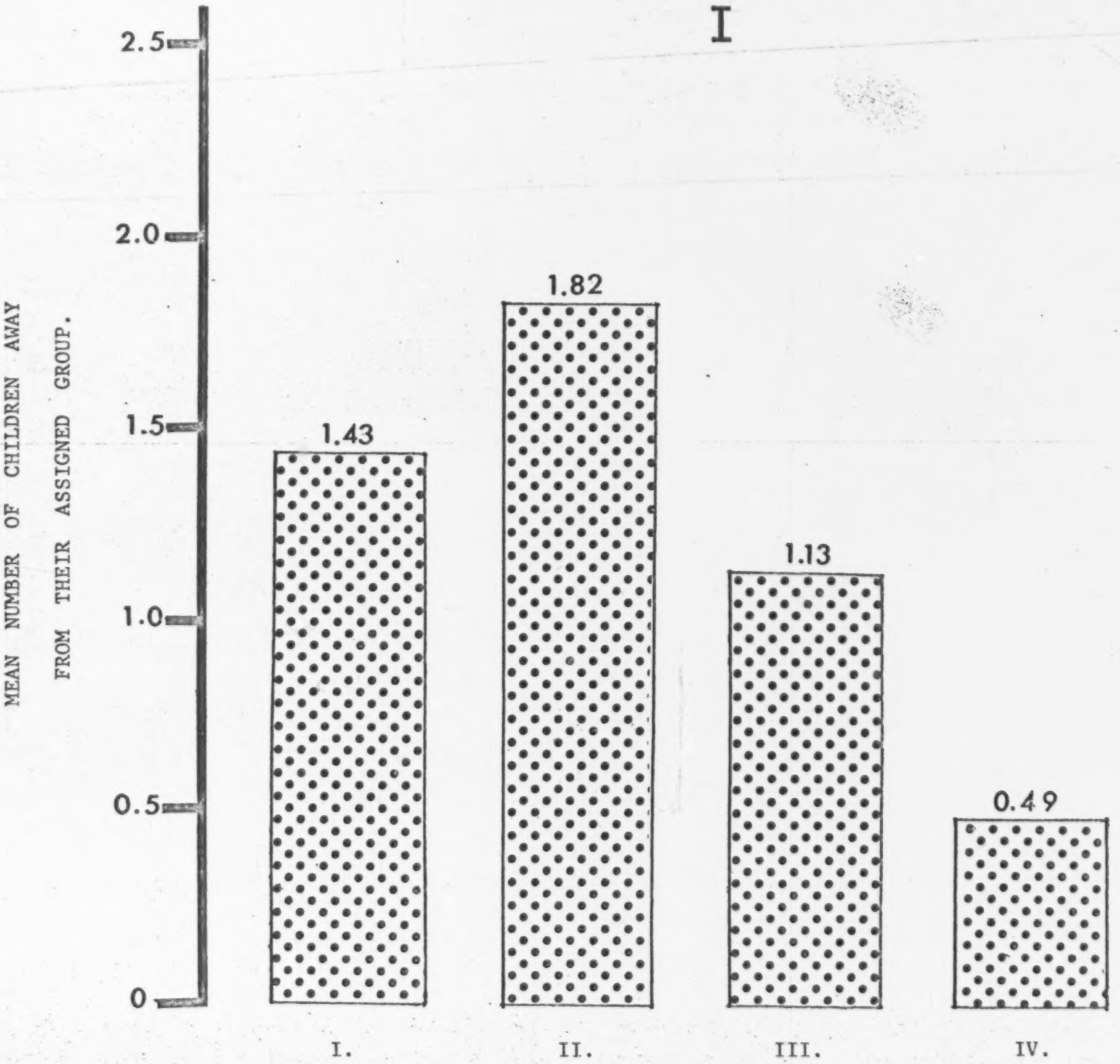
17. On thing that made training effective was that every child got the chance to practice all the behaviors during the training period. (T)

18. They've matured a lot. They're managing their own behaviors. (T)

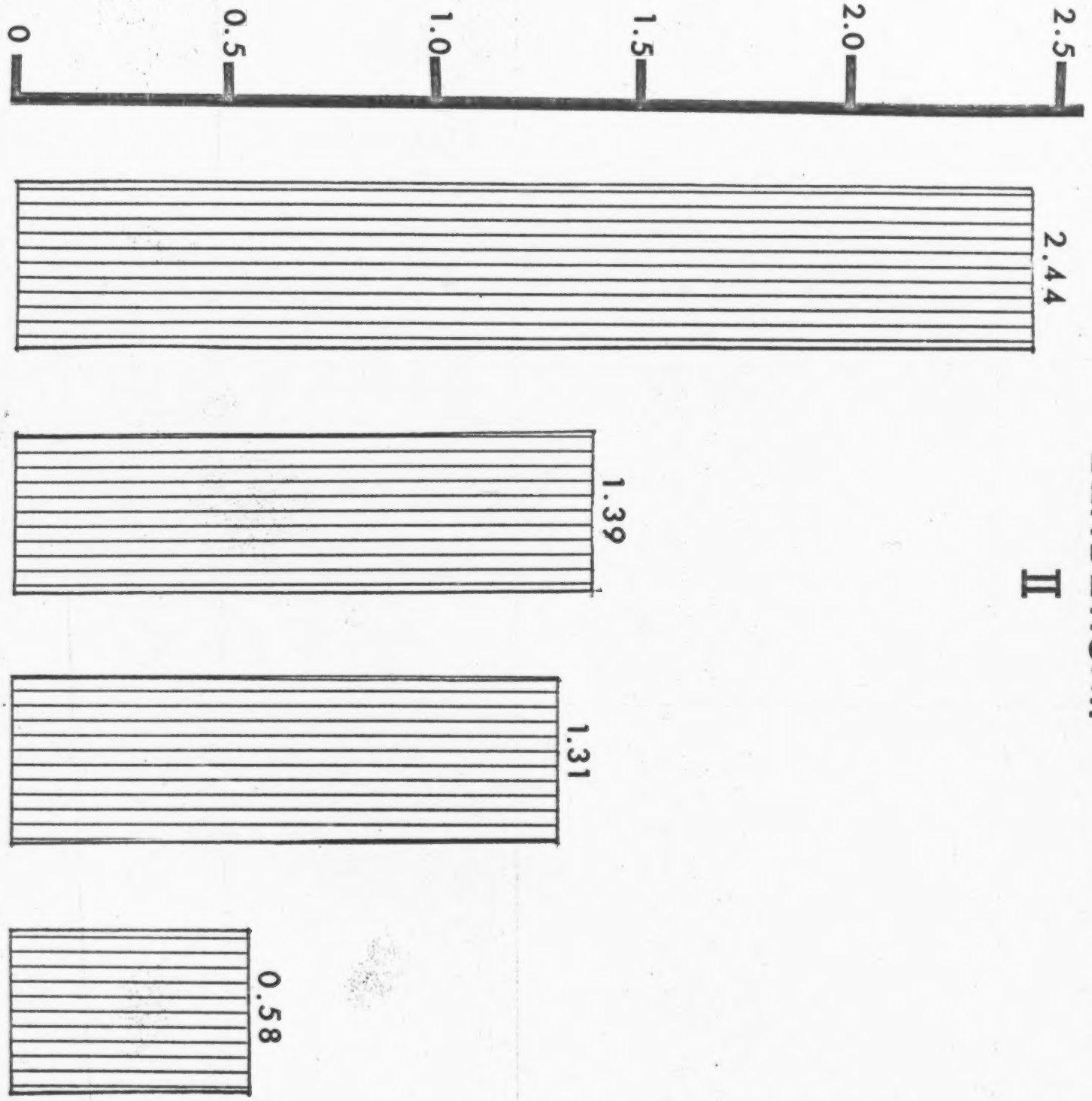
19. Both teachers reported that they became bored at going through each lesson five times. However, they both said that we should be sure to say in the manual, "The results are worth it though.".

20. The children feel good about themselves. (A)

LEADERSHIP
I

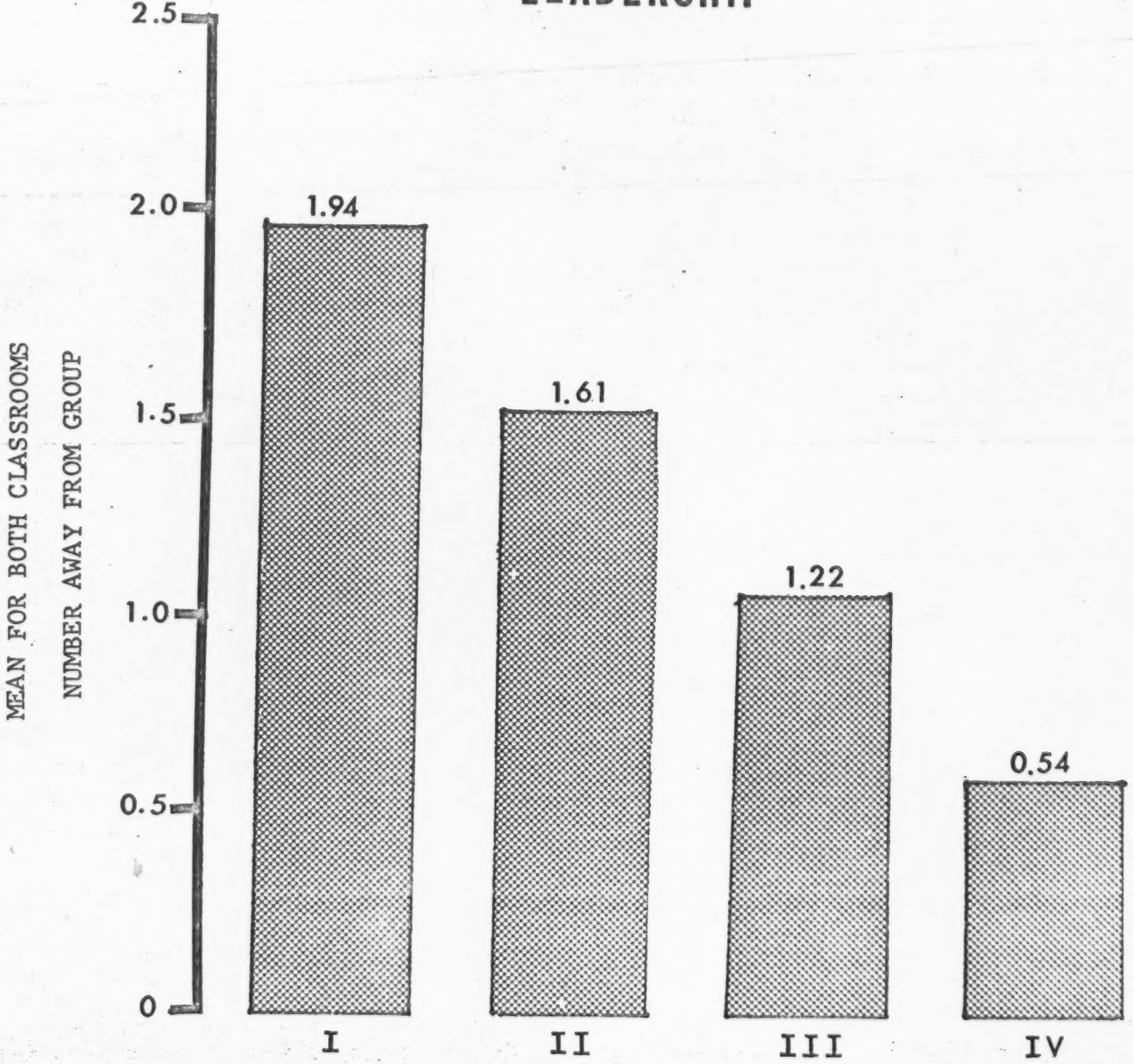


MEAN NUMBER OF CHILDREN AWAY FROM THEIR ASSIGNED GROUP.



LEADERSHIP II

LEADERSHIP


MEAN FOR BOTH CLASSROOMS
NUMBER AWAY FROM GROUP
2.5
2.0
1.5
1.0
0.5
0
1.94
1.61
1.22
0.54
I
II
III
IV